UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,417	05/23/2005	Bernd Rumpf	502901-331 PUS	9928
27799 7590 07/28/2009 COHEN, PONTANI, LIEBERMAN & PAVANE LLP 551 FIFTH AVENUE			EXAMINER	
			HOLLOWAY III, EDWIN C	
SUITE 1210 NEW YORK, NY 10176		ART UNIT	PAPER NUMBER	
			2612	
			MAIL DATE	DELIVERY MODE
			07/28/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
	10/511,417	RUMPF, BERND			
Office Action Summary	Examiner	Art Unit			
	Edwin C. Holloway, III	2612			
The MAILING DATE of this communicated for Reply	ation appears on the cover sheet wit	th the correspondence address			
A SHORTENED STATUTORY PERIOD FOR WHICHEVER IS LONGER, FROM THE MAIN - Extensions of time may be available under the provisions of after SIX (6) MONTHS from the mailing date of this communing of the period for reply is specified above, the maximum staturent of the period for reply will any reply received by the Office later than three months after earned patent term adjustment. See 37 CFR 1.704(b).	ILING DATE OF THIS COMMUNIC 37 CFR 1.136(a). In no event, however, may a re- lication. tory period will apply and will expire SIX (6) MONI II, by statute, cause the application to become ABA	CATION. Apply be timely filed FHS from the mailing date of this communication. ANDONED (35 U.S.C. § 133).			
Status					
1) ☐ Responsive to communication(s) filed 2a) ☐ This action is FINAL . 2b 3) ☐ Since this application is in condition fo closed in accordance with the practice	o) This action is non-final. In allowance except for formal matter.				
Disposition of Claims					
4) ☐ Claim(s) 16 is/are pending in the appliance 4a) Of the above claim(s) is/are 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-6 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction	withdrawn from consideration.				
9) The specification is objected to by the I 10) The drawing(s) filed on is/are: a Applicant may not request that any objection Replacement drawing sheet(s) including the	a) accepted or b) objected to be on to the drawing(s) be held in abeyand ne correction is required if the drawing(s)	ce. See 37 CFR 1.85(a). s) is objected to. See 37 CFR 1.121(d).			
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	D-948) Paper No(s	ummary (PTO-413))/Mail Date formal Patent Application 			

Application/Control Number: 10/511,417 Page 2

Art Unit: 2612

EXAMINER'S RESPONSE

1. Applicant's submission filed on 04-06-2009 has been entered. Claims 1-6 are pending. The examiner has considered the previously presented claims and applicant's arguments in view of the disclosure and the present state of the prior art. And it is the examiner's position that the claims are unpatentable for the reasons set forth in this Office action:

Specification

2. The objections to the abstract and page 2 of the disclosure are withdrawn in response to applicant's amendments to correct the abstract and specification.

Claim Rejections - 35 USC § 102 & 103

- 3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 4. Claims 1 and 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Mutoh '414 (US 5703414).

Regarding claim 1, Mutoh '414 discloses an apparatus arranged for providing drive-off security in a motor vehicle environment through blocking one or more vehicle engine system subfunctions said apparatus comprising:

a detection circuit (theft detector 10a) detecting an unauthorized system activation, and

an on-off control circuit (engine control unit ECU 16) pertaining to and controlling a fuel pump arrangement functionality means (fuel pump 18), said on-off control circuit being configured to electronically start the fuel pump arrangement at an attempted

Art Unit: 2612

starting of the motor vehicle and being triggered to electronically switch off the fuel pump after the attempted starting when said detecting circuit detects that the attempted starting was unauthorized. See fig. 1, the abstract, col. 3 line 41 - col. 4 line 25 and col. 4 line 66 - col. 5 line 34. The ECU is a electronic control circuit that controls on-off (enable/halt) of various vehicle sections, such as fuel pump, via electrical signals/commands. Mutoh '414 eliminates delay in engine start by allowing the engine (including fuel pump) to start in response to attempted starting (switch-ON operation) and switches off (halts) the fuel pump "after" attempted starting when the detection circuit (10a) detects the attempt was unauthorized (col. 2 line 28 - col. 3 line 7).

Regarding claim 4, Mutoh '414 discloses a drive-off security electronic circuit (transmitter 4 in key 2 of fig. 6) wherein said detection circuit determines whether a preestablished code word (ID code) is received from the drive-off security electronic circuit, said on-off control circuit being triggered to electronically switch off the fuel pump if no code word or an erroneous code word is received (halt control if ID does not match in col. 3 line 49 - col. 4 line 25). Alternatively, the theft detector 10a may be considered a drive-off security electronic circuit and the immobilization determining section 16b may be considered a detection circuit that provides an instruction to halt operation if it does not receive an enable code or receives a theft code.

Regarding claim 5, Mutoh '414 discloses said drive-off security circuit further encompasses at least one of start means inhibition (start relay 15), spark means inhibition

(ignition control unit 20), and fuel injection means inhibition facilities (fuel injection valve 17) in col. 3 line 49 - col. 4 line 25).

Claim 6 is directed the limitations of apparatus claim 1 being included in a motor vehicle that is anticipated by Mutoh '414 disclosing a vehicle such as a car in col. 1 lines 19-33.

5. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mutoh '414 (US 5703414) as applied above in combination with Gilmore (US 6144112).

Mutoh '414 does not expressly disclose the physical position of the apparatus of claims 2 and 3.

Gilmore discloses a drive-off security (immobilization) apparatus with a control on-off circuit (fuel pump control unit) housed integrally within the fuel pump to make it more difficult for a thief to break into a communication link or control lines between the control unit and the pump. See the abstract, col. 2 lines 59-67, col. 4 lined 8-14 and fig.

1. This corresponds to said on-off control circuit physically arranged in the immediate vicinity of a fuel tank of the motor vehicle in claim 2. This correspond to said on-off control circuit is physically integrated with one of a fuel tank or a fuel pump element of the motor vehicle of claim 3.

Regarding claims 2-3, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in Mutoh '414 the physical position of the apparatus of claims 2-3 disclosed in Gilmore in order to make it more

difficult for a thief to break into an communication link or control lines between the control unit and the pump.

6. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mutoh '414 (US 5703414) as applied above in combination with Woodall (US 5600723).

Mutoh '414 does not expressly disclose the physical position of the apparatus of claims 2 and 3.

Woodall discloses a drive-off security (secure electronic fuel pump) apparatus with a control on-off circuit (fuel pump driving circuit 29 and decode circuit 25) housed integrally within the fuel pump to make an attempt to circumvent the security system so difficult and time consuming that a thief is effectively prevented from obtaining access to the circuitry. See fig. 1, the abstract and col. 4 lines 1-5. This corresponds to said on-off control circuit physically arranged in the immediate vicinity of a fuel tank of the motor vehicle in claim 2. This correspond to said on-off control circuit is physically integrated with one of a fuel tank or a fuel pump element of the motor vehicle of claim 3. The fuel pump is disabled if a proper code is not received in col. 2 lines 22-41. Although switch off "after" an attempt is not expressly stated, it is suggested by the periodic recycling in col. 3 lines 51-61 wherein a thief may initially guess the code, then the code is changed and the pump is turned off.

Regarding claims 2-3, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in Mutoh '414 the physical

position of the apparatus of claims 2-3 disclosed in Woodall in order to make an attempt to circumvent the security system so difficult and time consuming that a thief is effectively prevented from obtaining access to the circuitry.

Alternatively, regarding claims 1-6, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in Woodall the switch off "after" an attempt as disclosed in Mutoh '414 in order to eliminates delay in engine start.

Response to Arguments

7. Applicant's arguments filed 04-06-2009 with respect to claims 1-6 have been full considered but they are not persuasive.

Applicant argues that since *Mutoh* discloses only that control operation is halted, there is no teaching or suggestion in *Mutoh* that the engine control unit (1) electronically starts the fuel pump at an attempted start of the motor vehicle, and (2) is triggered to electronically switch off the fuel pump after the attempted starting when a detection circuit detects that the attempted starting was unauthorized. Thus, *Mutoh* fails to teach or suggest "said on-off control circuit being configured to electronically start the fuel pump arrangement at an "attempted starting of the motor vehicle and being triggered to electronically switch off the fuel pump after the attempted starting when said detection circuit detects that the attempted starting was unauthorized," as expressly recited in independent claims 1 and 6.

Art Unit: 2612

The above argument is not persuasive because Mutoh '414 is not limited to only halting control operation, but also includes turning ON or starting operation corresponding to (1) electronically starts the fuel pump at an attempted start of the motor vehicle in col. 1 lines 49-59:

Page 7

The moment the power is turned ON, the starter relay 15 is energized and a starter motor 9 begins to rotate. The engine control unit 16a reads detected values of sensors (not shown) such as a TDC sensor for detecting the revolution of the engine and a negative pressure sensor on an inlet pipe and carries out fuel injection control and ignition control to supply commands to various sections including the fuel injection valve 17, the fuel pump 18, and the ignition control unit 20. The theft detector 10a deciphers an ID code supplied from the key 2 when the power is turned ON and determines whether it matches an expected or predetermined ID code. (emphasis added)

Further, Mutoh '414 discloses that the ECU halts the above control if starting is not authorized corresponding to (2) is triggered to electronically switch off the fuel pump after the attempted starting when a detection circuit detects that the attempted starting was unauthorized in col. 4 lines 4-11:

The enable code and/or the theft code is supplied to the immobilization determining section 16b in the engine ECU 16; the immobilization determining section 16b supplies a control halt instruction b to the engine control section 16a if the theft code is detected or if it does not receive the enable code. The <u>engine control section 16a halts the control operation</u>, which is being implemented, to stall the engine in response to the control halt instruction b. (emphasis added)

The ECU is an electronic control unit or circuit supplying or issuing commands to control switch-ON (start) operation and switch-OFF (halt) of operation to various sections including the fuel pump. Such commands are electrical or electronic signals

Application/Control Number: 10/511,417

Page 8

Art Unit: 2612

(col. 1) providing electronic on-off control. The fuel pump itself is controlled, rather than mechanically cutting off supply of fuel from the gas tank to the fuel pump. An object of the invention disclosed in Mutoh '414 is to eliminate the delay in engine start (col. 3 lines 29-32). This object is provided by initially turning ON at attempted start and turning OFF <u>after</u> the attempted starting when said detection circuit detects that the attempted starting was unauthorized (col. 2 lines 33-47).

Applicant argues that the combination of Mutoh and Gilmore is deficient because the process in Gilmore is subject to delays. This argument is not persuasive because Mutoh already discloses inhibiting after initial turn ON to avoid delay as discussed above. Since this is a 103 rejection, it is not necessary for Gilmore to anticipate all the claimed limitations. Electronic control circuitry incorporated in the fuel pump is disclosed in Gilmore (col. 1 lines 19-33).

Applicant argues that the combination of Mutoh and Woodall is deficient because there is no teaching or suggestion in Woodall of the on-ff control circuit configured to electronically start and electronically switch off the fuel pump. This argument is not persuasive because fig. 1 of Woodall expressly discloses electronic control of the vehicle fuel pump in the last three lines of the abstract. Turning OFF after initially turning ON the pump need not be anticipated by Woodall as this is already disclosed by Mutoh to avoid delay as discussed above.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to

Application/Control Number: 10/511,417 Page 9

Art Unit: 2612

applicant's disclosure. Joao (US 5513244) and Tejada (US 4892167) disclose vehicle anti-theft systems with electrically/electronically controlled fuel pump.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

CONTACT INFORMATION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edwin C. Holloway, III whose telephone number is (571) 272-3058. The examiner can normally be reached on M-F from 9:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Zimmerman, can be reached on (571) 272-3059.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

7/27/2009 (571) 272-3058 /Edwin C. Holloway, III/ Primary Examiner, Art Unit 2612